

## Contact Information

**Registration fee: \$59 per person. Pre-registration with full payment is required. Registrations must be received by January 17, 2006.**

### Method of Payment:

- ☐ Check enclosed (**Payable to SCMEP**)
- ☐ Credit Card (Visa or MasterCard accepted via phone, fax, or mail. Please see reverse side if paying by mail.)

### Please mail registrations to:

Teresa Kirby  
SCMEP  
817 Calhoun Street  
Columbia, SC 29201  
Phone: 803-252-6976, Ext. 221  
Fax: 803-254-8512  
E-mail: [tkirby@scmep.org](mailto:tkirby@scmep.org)

### Technical Information:

Charles Rampey  
Phone: 803-331-9410  
Fax: 803-754-2521  
E-mail: [crampey@sc.rr.com](mailto:crampey@sc.rr.com)

*Participation is limited to the first 25 registrants.  
Full refund will be given if written cancellation is received by January 17, 2006.*

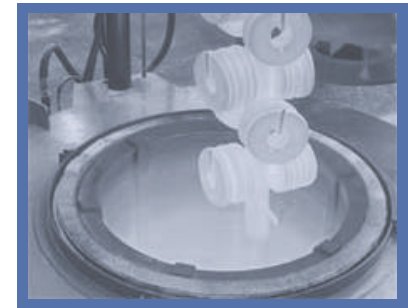
### A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

SCMEP  
817 Calhoun Street  
Columbia, SC 29201

## Process Heating Assessment

industrial training workshop



### Residence Inn by Marriott

90 Ripley Point Drive  
Charleston, SC 29407

February 1, 2006



U.S. Department of Energy  
Energy Efficiency and Renewable Energy  
*Bringing you a prosperous future where energy is clean,  
abundant, reliable, and affordable.*

## Overview

The U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy and the Industrial Heating Equipment Association are pleased to offer the *Process Heating Assessment* workshop. Students attending the one-day workshop will learn:

- How to improve energy efficiency and reduce emissions from furnaces
- Practical tips on process heating equipment operations and maintenance
- How to use PHAST software to assess energy consumption in furnace components

This workshop includes an introduction to process heating and process heating equipment such as furnaces, ovens, dryers, heaters, kilns, etc., used by the industry. It includes discussion of combustion and other heating methods, heat transfer in furnaces, heat containment, waste heat recovery, commonly used process heating controls, and emission reduction related to process heating.

Students will also learn how to use the Process Heating Assessment and Survey Tool (PHAST). PHAST can survey furnaces, identify major energy using equipment, prioritize improvement opportunities, and assess available methods that can be used to reduce energy consumption in an industrial plant.

Optimize your process heating systems and reduce energy costs...

## Agenda

### 8:00 - 8:30 Registration

### 8:30 - 12:00 Morning Session

- Introduction - Process Heating
- Basics - Combustion, Heat Transfer, and Emissions
- Opportunities for Efficiency Improvement
  - Heat Generation
  - Heat Transfer

### 12:00 - 1:00 Lunch

### 1:00 - 4:00 Afternoon Session

- Opportunities for Efficiency Improvement (cont.)
  - Waste Heat Recovery
  - Controls
- Data Collection Equipment
- Process Heat Assessment and Survey Tool (PHAST) - Presentation and Demonstration
- Discussion and Feedback

## Instructor

**Dennis Quinn** is a Senior Product Manager for Regenerative and Indirect Combustion Systems at The North American Mfg. Co. Ltd. With 25 years experience in the field of combustion research, product development and business unit management while at North American, Mr. Quinn has spent extensive time on combustion applications over a wide range of industries. Mr. Quinn holds degrees in Combustion and Mechanical Engineering.

## Registration Form

Register early to ensure space - seating is limited!

Registration fee is **\$59** per person. Please see reverse side for payment information.

First Name Last Name

Company Name

Street Address

City State Zip

Phone Fax

Email Address

Credit Card # (if paying by credit card)

Signature (if paying by credit card)

Co-sponsored by:



## Accommodations

A block of rooms is being held for this training for \$94 plus tax per night at the Residence Inn. When making your reservation, please mention the SCMEP training. Please contact the hotel directly to make your reservation at 843-571-7979.